

10/527613

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
25 March 2004 (25.03.2004)

PCT

(10) International Publication Number
WO 2004/024409 A1

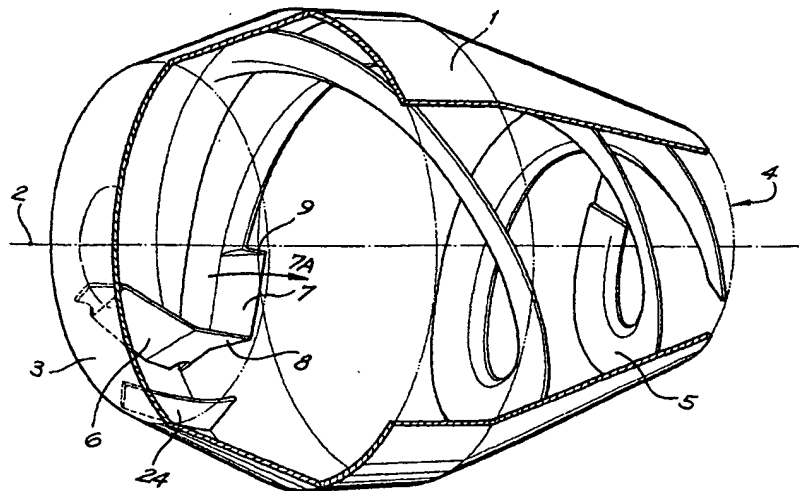
- (51) International Patent Classification: **B28C 5/22, 5/42** (74) Agent: **F B RICE & CO**; 605 Darling Street, Balmain, NSW 2041 (AU).
- (21) International Application Number: PCT/AU2003/001180 (81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (22) International Filing Date: 10 September 2003 (10.09.2003)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data: 2002951329 11 September 2002 (11.09.2002) AU (84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
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Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: A MIXING APPARATUS FOR CONCRETE



(57) Abstract: A truck mounted concrete mixer includes a mixing drum (1) rotatable about a longitudinal axis (2) having a drum head (3) and an open end (4) to receive batch materials to be mixed. A pair of generally helical mixing blades (5) are disposed within the drum (1) but instead of extending to the drum head (3) as occurs in standard concrete mixers, the mixing blades terminate short of the drum head (3) and a second blade (6) extends from each mixing blade (5) toward the drum head (3) at an angle of about 90° to the helical blade (5) and at a height greater than that of the adjoining mixing blade. This height difference defines a spillway formation (7) above the mixing blade (5). In use, the second blade (6) acts to push or mechanically transfer material from near the drum head to the centre bottom area of the drum into an air gap above the material where it cascades down over the spillway formation upon mixing rotation of the drum which has the effect of maximising frictional and impact forces and breaking open lumps and agglomerations formed in the material. The material then re-engages the main mixing blade (5) and is wound forward once again repeating the mechanically induced mixing action.

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